INTERNATIONAL SEARCH REPORT

International application No.

A. CLASSIFICATION OF SUBRECT MATTER Int. C1 F16D48/06, F16D23/12, B60K23/02 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched other than minimum documentation to the extent that such documents are included in the fields tearched		PC1/JP2004/000302		004/000302	
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Int.Cl? F16D48/06, F16D23/12, B60K23/02 Decumentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922—1996 Jitsuyo Shinan Toroku Koho 1996—2004 Kokai Jitsuyo Shinan Koho 1971—2004 Toroku Jitsuyo Shinan Koho 1994—2004 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. F, X JP 2003—34161 A (Rinjiro SUDA), 16,19 P, A GFebruary, 2003 (04.02.03), 19-2-11,14, 19-2-2-1,13, 19-2-1,14, 19-2-2-1,13, 19-2-1,14, 19-2-2-1,13, 19-2-2-2-1,13, 19-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2			/02		
Minimum documentation searched (classification system followed by classification symbols) Int.Cl? F16D48/06, F16D23/12, B60K23/02	According to Int	ernational Patent Classification (IPC) or to both national	al classification and IPC		
Minimum documentation searched (classification system followed by classification symbols) Int.Cl? F16D48/06, F16D23/12, B60K23/02	B. FIELDS SE	ARCHED			
Jitsuyo Shinam Koho 1922–1996 Jitsuyo Shinam Toroka Koho 1996–2004 Kokai Jitsuyo Shinam Koho 1971–2004 Toroku Jitsuyo Shinam Koho 1994–2004 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Cetegory* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. P, X JP 2003–34161 A (Rinjiro SUDA), 1, 9–11,14, 16,19 P, A Par. Nos. [0028] to [0036] (Family: nome) Y Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 97311/1990 (Laid-open No. 5433/1992) (Eika KA), 11 May, 1992 (11.05.92), Full text (Family: nome) Expression cause of the state which is not considered to be of graticular relevance, the claimed invention of the site of catablish the publication date of another cluition or other spotal recent which may throw doubts on priority claim(s) or which is cited to establish the publication date of another cluition or other spotal accounce of specified prior to the international filing date to be entire replication of patent but published on or after the international filing date car priority date claimed to be of graticular relevance, the claimed invention cannot be considered note of particular relevance, the claimed invention cannot be resident for involve an inventive step when the document is taken alone document the priority date claimed. To document referring to an oral disclosure, use, exhibition or other means report accounted to provide the claimed invention cannot be considered not to report addition the comment of particular relevance, the claimed invention cannot be considered not involve an inventive step when the document it step to involve an inventive step when the document of particular relevance, the claimed invention cannot be considered not involve an inventive step when the document it polynomic provides to a provide accounted to particular relevance, the claimed inventi	Minimum docum Int.Cl	nentation searched (classification system followed by cl F16D48/06, F16D23/12, B60K23	assification symbols) /02		
C. DOCUMENTS CONSIDERED TO BE RELEVANT Cetegory* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. P,X JP 2003-34161 A (Rinjiro SDDA), 04 February, 2003 (04.02.03), P,A Par. Nos. [0028] to (0036] (Family: none) Y Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application A No. 97311/1990 (Laid-open No. 5433/1992) (Eika KA), 11 May, 1992 (11.05.92), Full text (Family: none) X Further documents are listed in the continuation of Box C. * Special categories of cited documents: 4 document defining the general state of the at which is not considered to be of particular relevance: * Special categories of cited documents: 4 document defining the general state of the at which is not considered to implication but cited to understand the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an invention cannot be special reactor (es specified) **Comment which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clintion or other special reactor (es specified) **Comment which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clintion or other special reactor (es specified) **Comment which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clintion or other special reactor (es specified) **Comment which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clintion or other means of the same patent family **Comment which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clintion or other means of the same patent family **Comment which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clintion or other means of the same patent family **Comment which may throw doubts on	Jitsuyo Kokai J	Shinan Koho 1922-1996 Ji itsuyo Shinan Koho 1971-2004 To	itsuyo Shinan Toroku Koho oroku Jitsuyo Shinan Koho	1996-200 4 1994-200 4	
Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. P,X JP 2003-34161 A (Rinjiro SUDA), 16,19 PAR. Nos. [0028] to [0036] 2-8,12,13, 16,19 PAR. Nos. [0028] to [0036] 2-8,12,13, 15,17,18,20 Y Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 97311/1990 (Laid-open No. 5433/1992) 11 May, 1992 (11.05.92), Full text (Family: none) V Further documents are listed in the continuation of Box C.	Electronic data t	ase consulted during the international search (name of	data base and, where practicable, search te	rms used)	
P,X JP 2003-34161 A (Rinjiro SUDA), 04 February, 2003 (04.02.03), Par. Nos. [0028] to [0036] Y Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application A No. 97311/1990 (Laid-open No. 5433/1992) (Eika KA), 11 May, 1992 (11.05.92), Full text (Family: none) * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance carlier application or patent but published on or after the international filing date or priority date and not in conflict with the application but cited to understand the priority date canables the publication date of another citation or other special reason (as specified) "I" document which may throw doubts on priority claim(s) or which is determined that the special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date to the priority date claimed Date of the actual completion of the international search 13 April, 2004 (13.04.04) Date of mailing of the international search report 11 May, 2004 (11.05.04) Name and mailing address of the ISA/ Japanese Patent Office	C. DOCUMEN	ITS CONSIDERED TO BE RELEVANT		·	
P, A Par. Nos. [0028] to [0036] Y Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 97311/1990 (Laid-open No. 5433/1992) (Eika KA), 11 May, 1992 (11.05.92), Full text (Family: none) * Special categories of cited documents: document defining the general state of the at which is not considered to be of particular reference carrier application or patent but published on or after the international filing date or priority claim(s) or which is cited to stabilish the publication date of another clintion or other special reason (as specified) "L" document which may throw doubts on priority claim(s) or which is cited to stabilish the publication date of another clintion or other special reason (as specified) "O' document referring to a nord disclosure, use, exhibition or other means the priority date claimed Date of the actual completion of the international search 13 April, 2004 (13.04.04) Name and mailing address of the ISA/ Japanese Patent Office			<u> </u>		
to the request of Japanese Utility Model Application No. 97311/1990 (Laid-open No. 5433/1992) (Eika KA), 11 May, 1992 (11.05.92), Full text (Family: none) Toucher documents are listed in the continuation of Box C. See patent family annex.		04 February, 2003 (04.02.03), Par. Nos. [0028] to [0036]		16,19 2-8,12,13,	
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other the priority date claimed "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search 13 April, 2004 (13.04.04) Name and mailing address of the ISA/ Japanese Patent Office "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "C" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "C" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "C" "O" document referring to an oral disclosure, use, exhibition or other means the priority date claimed "A" Date of the actual completion of the international search 13 April, 2004 (13.04.04) Authorized officer Authorized officer		to the request of Japanese Ut: No. 97311/1990(Laid-open No. (Eika KA), 11 May, 1992 (11.05.92), Full text	ility Model Application	17. 2-9,13-15,	
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other the priority date claimed "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search 13 April, 2004 (13.04.04) Name and mailing address of the ISA/ Japanese Patent Office "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "C" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "C" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "C" "O" document referring to an oral disclosure, use, exhibition or other means the priority date claimed "A" Date of the actual completion of the international search 13 April, 2004 (13.04.04) Authorized officer Authorized officer				,	
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another cliation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search 13 April, 2004 (13.04.04) Name and mailing address of the ISA/ Japanese Patent Office dete and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or canno	Further documents are listed in the continuation of Box C.				
Japanese Patent Office	"A" document d to be of part "E" earlier applifiling date "L" document we cited to estimate to estimate the comment resord to the priority of the priority of the actual to the priority of the priority of the actual to the part of the actual to the part of the actual to the actual to the part of the part of the actual to the part of the part of the part of the part of the actual to the part of the pa	A" document defining the general state of the art which is not considered to be of particular relevance E" earlier application or patent but published on or after the international filing date L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O" document referring to an oral disclosure, use, exhibition or other means the priority date claimed O" document published prior to the international filing date but later than the priority date claimed Oate of the actual completion of the international search Date of mailing of the international search report			
			Authorized officer		

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2004/000302

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT	•
Category*	Citation of document, with indication, where appropriate, of the relevant passages	1,10-12,16, 17 2-9,13-15, 18-20 12,17 1-11,13-16, 18-20
Y A	EP 590240 A2 (SUZUKI KABUSHIKI KAISHA), 06 April, 1994 (06.04.94), Full text & JP 6-117450 A full text & US 5413200 A & AU 3992593 A & CA 2098002 A	
Y A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 49411/1990 (Laid-open No. 8120/1992) (Mitsubishi Motors Corp.), 24 January, 1992 (24.01.92), Full text (Family: none)	
-		·
٠		
	·	
•		
•		
	· •	
		·
•		
		•
		<u> </u>